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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,096	07/02/2002	Michael Thompson	P67753US0	5013

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EXAMINER

YOHA, CONNIE C

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,096

Applicant(s)

THOMPSON ET AL.

Examiner

Connie c. Yoha

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/6/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 10 is/are allowed.
- 6) ☐ Claim(s) 1, 4-6, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

1. Examiner took notice of the remarks and amendments made by applicant filed on 3/6/03.
2. Examiner likes to acknowledge that with regarding to the reference Kobayashi et al (4811294) of which was cited as prior art for claim rejection under 35 USC §103 was a typo error. Reference Katti et al (6219273) was the correct reference used as prior art to reject the claims of which was cited on the PTO-892 form.
3. Prior 103 rejection applied to the pending claims is now withdrawn. A new non-final rejection is used this action.

Response to Amendment

4. This office action is in response to Amendment filed on 3/6/03.

Claims 1-6 are amended.

Claim 7 is canceled.

Claim 10 is newly added.

Claims 1-6, 8-10 are pending.

Claim Rejections - 35 USC 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Papaliolios, Pat. No. 5218566.

With regard to claim 1, Papaliolios discloses a device for reading data stored in a passive matrix memory comprising memory cells in the form of ferroelectric capacitors (fig. 2, 30), wherein said sensing device senses a current response corresponding to the data including a binary one or a binary zero, and performs an integrator circuit for sensing the current response and means for storing and comparing two consecutive read values, one of which is a reference value (fig. 2, Fixed reference voltage) (col. 5, line 1-13) (also with regard to claim 8 and 9).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papaliolios, Pat. No. 5218566 in view of Jaffe et al, Pat. No. 5086412 (previously cited on form PTO 892).

With regard to claim 4, Papaliolios , as applied in prior rejection, disclosed all claimed subject matter except the means for two consecutive reads comprises a first sample/hold circuit for sampling/storing a first read value, a second sample/hold circuit for sampling/storing a second read value and a comparator circuit connected to the outputs of the sample/hold circuits for determining the state of an addressed memory cell. However, Jaffe discloses the means for two consecutive reads comprises a first sample/hold circuit (fig. 5, 220) for sampling/storing a first read value (col. 4, line 21-35), a second sample/hold circuit (fig. 5, 222) for sampling/storing a second read value (col. 4, line 37-43) and a comparator circuit connected to the outputs of the sample/hold circuits for determining the state of an addressed memory cell (col. 4, line 59-68) (also with regard to claim 6).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Papaliolios, Pat. No. 5218566 in view of Jaffe et al, Pat. No. 5086412 (previously cited

Art Unit: 2818

on form PTO 892) and further in view of Katti et al, Pat. No. 6219273 (previously cited on form PTO 892).

With regard to claim 5, Papaliolios and Jaffe, as applied in prior rejection, disclosed all claimed subject matter except the sample/hold circuits comprise capacitors. However, Katti teaches providing a capacitor as a sample/hold circuits (fig. 714) in a sensing device to sample and hold a data value prior to compare its values. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sample/hold circuit of Papaliolios and Jaffe with the capacitor sample/hold as taught by Katti, since the capacitor of Katti would provide the sampling and holding data of Papaliolios and Jaffe to be used prior to input into the comparator device.

Allowable Subject Matter

8. Claim 2-3 are objected as being dependent upon a rejected base claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not show the limitation of said control circuit includes the integrator circuit to have an operational amplifier and a capacitor connected between an inverting input and the output of the operational amplifier.

9. Claim 10 is allowed.

10. Claim 10 is considered allowable since prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations having a sensing device comprising a passive matrix memory comprises memory cells

Art Unit: 2818

in the form of ferroelectric capacitors, having an integrator circuit for sensing the current response and a mean for storing and comprising two consecutive read values, the means for storing two consecutive reads comprises a first and second sample/hold circuit for sampling/storing a first and second read value, and comparator circuit connected to the outputs of the sample/hold circuits for determining the state of an addressed memory cell and a correction circuit being connected between the second sample/hold circuit and the output of the integrator circuit.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. Nair et al (6529398), Nair (6522568), and Aikawa (6288934) disclose a memory device.

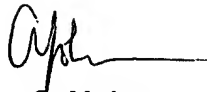
12. When responding to the office action, Applicants' are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

13. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02 (b)).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is (703) 306-5731. The examiner can normally be reached on Mon. - Fri. from 8:00 A.M. to 5:30 PM. The examiner's supervisor, David Nelms, can be reached on (703) 308-4910. The fax

Art Unit: 2818

phone number for this Group is (703) 308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-0956.



C. Yoha

May 2003



Connie C. Yoha

Patent Examiner

Art Unit 2818